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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/731,970	12/08/2000	Genevieve Loussouarn	2365-24	1749

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EXAMINER

BHATNAGAR, ANAND P

ART UNIT	PAPER NUMBER
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2623

DATE MAILED: 12/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/731,970

Applicant(s)

LOUSSOUARN ET AL.

Examiner

Anand Bhatnagar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5. 6) ☐ Other: ____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

A.) Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kreindel et al. (U.S. patent 6,162,212) in view of Amornsiripanitch (U.S. patent 6,389,150, will be further referred to as Amor.).

Regarding claims 1 and 8: Kreindel et al. discloses a system for the simulation and predictive analysis of the evolution of a hair region of the dermis of a subject over time (Kreindel et al.; col. 2 lines 35-45 and col. 6 lines 46-50, where the growth of the hair is predicted and simulated over time in an area of a person's skin. The skin is read as the "dermis" since the dermis is the part of the skin), characterized in that it comprises a means of observation of the said hair region able to output digital observation data (Kreindel et al.; col. 2 lines 35-40, the hair region of an area of the skin is observed), a first digital data processing means capable of classifying elementary parts of the said region on the basis of the observation data (Kreindel et al.; col. 2 lines 35-40 and col. 3 lines 11-18 and 38-41, where the hair is observed and analyzed for the growth stages present in the hairs), a second digital data processing means capable of simulating the

evolution of the said hair region as a function of the data emanating from the first digital data processing means (Kreindel et al.; col. 2 lines 40-45 and col. 6 lines 45-49, where the simulation of hair growth takes place) , and a means of displaying the data emanating from the second digital data processing means (Kreindel et al.; col. 6 lines 45-49, where the simulation is presented by graphic illustration, read as displayed), the data output by the first processing means comprising at least one classification according to the diameter of the hairs.

Kreindel et al. discloses to observe the hair growth cycles on a patient and to simulate the growth of hair over time (Kreindel et al.; col. 3 lines 37-41 and 53-67 and col. 6 lines 36-49). Kreindel does not teach a first processing nor a second processing. It is a matter of configuration of obtaining a final product. One skilled in the art may make one processor which may obtain the final product or design the system where 2 or more processors may perform specific tasks to obtain the same final product.

Kreindel et al. discloses to observe the hair growth cycles on a patient and to simulate the growth of hair over time (Kreindel et al.; col. 3 lines 37-41 and 53-67 and col. 6 lines 36-49). Kreindel does not disclose to classify according to the diameter of the hairs. Amor. teaches to classify the growth of the hairs according to the diameter of the hairs (Amor.; col. 2 lines 45-46). It would have been obvious to one skilled in the art to combine the teaching of Amor. to that of Kreindel et al. because they are analogous in analyzing the growth of hairs and obtaining certain parameters pertaining to the growth cycles of the hairs. One

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skilled in the art would have been motivated to incorporate the teaching, classifying the growth cycles according to the diameter of the hair shafts, of Amor. to the system of Kreindel et al. in order to observe and record the dynamic changes of all the parameters through out the hair's life cycle (Amor.; col. 2 lines 24-26).

Regarding claim 2: System characterized in that the data output by the first processing means furthermore comprise a classification of the hairs according to whether they belong to the Telogen, Anagen or Disappeared phases (Kreindel et al.; col. 3 lines 53-67, where the hairs numbers and duration of the cycles of hair growth are determined, the percentage of clearance of hair is read as the disappeared phase).

Regarding claim 3: System characterized in that the external data comprise at least the age of the subject (Kreindel et al.; col. 2 lines 35-40, where the gender of the subject is important. Many factors are important in studying the results of an experiment such as gender, age, eating habits, drugs presently taking, etc.).

Regarding claim 4: System characterized in that the second processing means is capable of calculating the proportion A of hairs in the Anagen phase (Kreindel et al.; col. 3 lines 53-67 and table 1).

Regarding claim 5: System characterized in that the second processing means is capable of calculating and forecasting the surface density of hairs (Kreindel et al.; col. 6 lines 45-50, where the simulation is performed of the future

hair growth), the proportion T of hairs in the Telogen phase, the proportion D of Disappeared hairs, and the individual rate of growth of the hairs.

Kreindel et al. discloses to obtain parameters pertaining to the growth cycles of the hairs, such as duration of the cycles number of follicles during each cycle, individual rate of growth of hairs, percentage of disappeared hairs, etc.

(Kreindel et al.; col. 3 lines 53-67, where the percentage of clearance is read as the proportion of disappeared hairs and the classification of the numbers of hairs in each specific growth cycles is read as the individual rate of growth of hairs).

Kreindel et al. does not teach to obtain certain hair parameters such as density of hairs, proportion of hairs in the dead phase. etc. Amornsiripanitch teaches to obtain certain parameters relating to the growth of the hairs such as percentage of growing hairs versus non-growing hairs, diameter size of the hair, density of the hair, budding activities, etc (Amor.; col. 2 lines 38-57 and col. 3 lines 8-11). It would have been obvious to one skilled in the art to combine the teaching of Amor. to that of Kreindel et al. because they are analogous in analyzing the growth of hairs and obtaining certain parameters pertaining to the growth cycles of the hairs. One skilled in the art would have been motivated to incorporate the teaching of hair reproduction parameters, modified for other parameters (such as proportion of dead hairs, proportion of disappeared hairs, etc.), of Amor. to the system of Kreindel et al. in order to observe and record the dynamic changes of all the parameters through out the hair's life cycle (Amor.; col. 2 lines 24-26).

Regarding claim 6: It is rejected for the same reason as claims 1 and 8 above and for the limitation of simulating the evolution of the entire head of hair of the subject on the basis of the data emanating from the second processing (Kreindel et al.; col. 6 lines 45-50, where the simulation is performed).

Regarding claiming 7: System characterized in that it comprises a means for associating data simulation the evolution of the face with the data emanating from the third processing (Kreindel et al.; Table 1 and col. 6 lines 45-50, where different areas of the body, including the face, are observed for their specific hair growth patterns).

Regarding claim 9: Process in which at least one observation is performed, each observation being preceded by a step of shaving the said hair region, the shaving step being separated from the corresponding observation by a first given duration (Amor.; col. 5 lines 34-36, where the hairs are cut to observe the hair growth stage, which can be performed at a any specific period of the growth cycle chosen by the operator). The obvious and motivation statements are the same as claims 1 and 8 above.

Regarding claim 10: Process in which at least two observations are performed, separated by a second given duration (Kreindel et al.; Table 1, where multiple locations, such as chin, legs, etc., are observed. It is obvious that multiple observations must take place at different times).

Regarding claim 11: Process in which, on the basis of the observation data, the hair coverage is calculated as a function of the number, the diameter

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and the length or the rate of growth of the hairs (Amor.; col. 2 lines 37-63 and col. 3 lines 9-11, where the density of the hairs is determined from the parameters obtained of the hair growth cycles). The obvious and motivation statements are the same as claims 1 and 8 above.

Regarding claim 12: It is rejected for the same reasons as claim 1 and 8 above and for the following limitation of perform a simulation of the evolution of the entire head of hair of the subject on the basis of the data emanating from the second processing and the data emanating from the third processing are displayed (Kreindel et al.; col. 6 lines 35-50, where the simulated data is displayed).

Conclusion

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Vaisberg et al. (U.S. patent 6,651,008 B1) for a system for predictive cellular bioinformatics.

Johnson et al. (U.S. patent 6,581,011 B1) for a databse of a tissue population.

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Contact Information

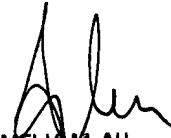
3. Any inquiry into this communication should be directed to Anand Bhatnagar whose telephone number is 703-306-5914, whose supervisor is Amelia Au whose number is 703-308-6604, group receptionist is 703-305-4700, and group fax is 703-872-9306.

AB

Anand Bhatnagar

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December 12, 2003



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